



Broadcasting
Board of
Governors

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program delivery overview

The Broadcasting Board of Governors (BBG) utilizes the full spectrum of multimedia platforms to reach audiences worldwide. Through the International Broadcasting Bureau (IBB), the Agency tailors delivery strategies to the fast-changing preferences and conditions of local markets.

The IBB Office of Engineering and Technical Services manages the BBG's global broadcast network, facilitating transmission over radio, television, Internet and new media.

The IBB Office of Marketing and Program Placement negotiates agreements with local radio stations, television stations and new media platforms such as mobile phone providers to carry or incorporate programming of BBG broadcasters.



radio and television

Most BBG broadcast signals travel from satellite dishes atop the BBG's headquarters in Washington, D.C. to communication satellites that relay the signals to transmitting stations worldwide. Transmitters and satellite dishes at these stations then redirect the signals to listeners and viewers.

The Office of Engineering manages a global network of over 80 transmitting sites that include 170 transmitters (FM, AM, and shortwave) and 400 antennas. Additional leased facilities worldwide complement this delivery network.

Shortwave and medium wave (AM) transmissions serve regions where radio remains popular as a source for news, including in Africa, and highly censored countries such as Burma and North Korea. IBB also maintains a large and growing network of dedicated FM transmitters in major metropolitan areas.

Satellite, cable and terrestrial TV broadcasts bring Alhurra TV, TV Marti, and VOA into the homes of viewing audiences. More than half of VOA's 45 broadcast languages now produce TV programming, including VOA's Persian News Network, which reaches Iranians via satellite.

In addition to its own dedicated channels and frequencies, IBB manages agreements with over 1,200 local radio and TV stations to air branded programming on AM, FM, terrestrial TV and cable TV.

The total cost for on-air program delivery (including transmitters, satellites and affiliates) is about \$81.9 million (FY 2010 estimate).

internet and new media

IBB facilitates the online availability of nearly every BBG program including new media components such as podcasts and audience comments or questions via text messages. Over 100,000 gigabytes of live or on-demand audio and video were streamed each month in 2009.

Pages on YouTube, Facebook and Twitter fuel increased engagement with audiences, as do blogs hosted internally or on external platforms like Blogger or LiveJournal.

IBB sites optimized for mobile devices are now available. In addition, agreements with mobile providers are enabling delivery of news headlines,

breaking news alerts and multimedia content via SMS.

Anti-Censorship

The IBB works to combat signal jamming and other forms of interference with program delivery. For example, the Office of Engineering has aggressively countered satellite jamming by the government of Iran since May 2009. Other methods to combat increasing Internet censorship include:

- Daily e-mails with news summaries, instructions for bypassing government filters, and links to proxy or shadow sites.

- Multimedia-capable client-side proxy software customized for the BBG. Freegate software has proven successful in cases such as Iran, where it was used heavily in the days following the controversial 2009 election.

- SMS delivery of proxy information, news and multimedia. Headline delivery via SMS has been used successfully in parts of Africa, including in Zimbabwe during the contentious 2008 presidential election.

surge broadcasting

Emergency situations sometimes call for temporary increases in the number of hours broadcast to a particular region. Recent examples of this strategy of "surge broadcasting" to provide audiences with additional coverage of news and information in times of conflict or critical need include:

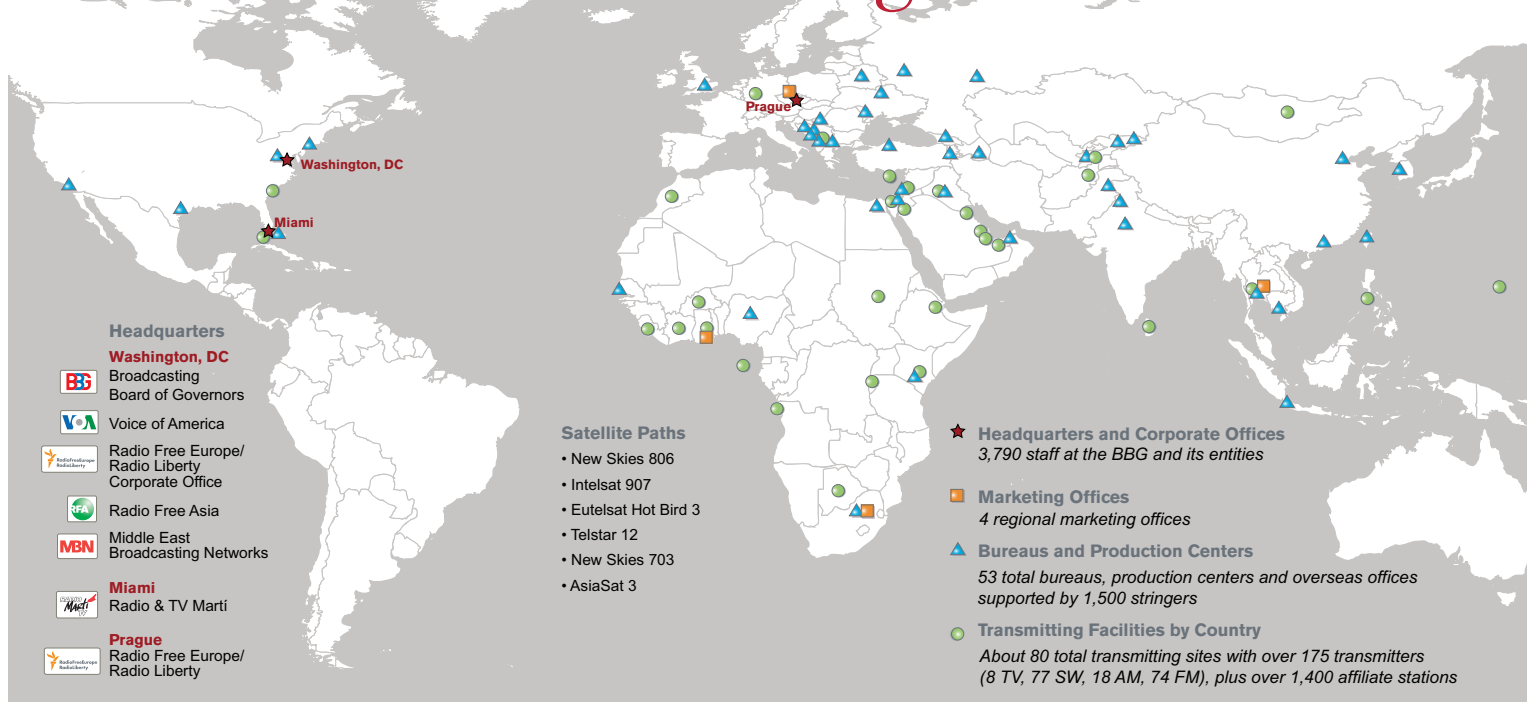
- The Afghanistan/Pakistan border to improve coverage of the war zone in 2009.
- Iran to cover the aftermath of the June 2009 presidential election.

- Georgia to address the conflict in South Ossetia in August 2008.

- Zimbabwe to respond to the political crisis in June 2008.

- Tibet to cover the violent crackdown by Chinese authorities in March 2008.

worldwide broadcasting facilities



radio waves

Radio signals used for broadcasting are often characterized by a name that describes their frequency or place on the radio dial. The common names are shortwave, medium wave (AM), and FM. Each type of signal has distinct characteristics.

Shortwave: Can travel 3,000 miles or more to reach across the globe. Shortwave is typically used to broadcast long distances into countries that censor

external transmissions or into remote regions where the listeners are highly dispersed. The radio dial must be changed depending on the time of day and time of year.

Medium wave (AM): Can be used to cover a local area of a few miles or travel more than 250 miles during the day and 1,200 miles at night. Noise from lights, computers, or other electrical equipment can play havoc with AM reception at times, but almost every radio can receive AM signals.

FM: Depending on the height of the transmitter and antenna, an FM signal can travel from 3 to 45 miles or more. FM signals are immune to most sources of electrical noise, and similar to AM, almost every radio can receive FM signals.



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The Broadcasting Board of Governors is an independent federal agency, supervising all U.S. government-supported, civilian international broadcasting, whose mission is to promote freedom and democracy and to enhance understanding through multimedia communication of accurate, objective, and balanced news, information, and other programming about America and the world to audiences overseas. BBG broadcasting organizations include the Voice of America, Radio Free Europe/Radio Liberty, the Middle East Broadcasting Networks (Alhurra TV and Radio Sawa), Radio Free Asia, and the Office of Cuba Broadcasting (Radio and TV Marti).

